

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

REC'D 06 OCT 2004

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Applicant's or agent's file reference FP1711	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/SG 02/00176	International filing date (day/month/year) 05.08.2002	Priority date (day/month/year)
International Patent Classification (IPC) or both national classification and IPC G06F12/08		
Applicant INFINEON TECHNOLOGIES AG		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 1 sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 23.12.2003	Date of completion of this report 05.10.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Ledrut, P Telephone No. +31 70 340-2566 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/SG 02/00176**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-7 as originally filed

Claims, Numbers

1-4 received on 12.05.2004 with letter of 12.05.2004

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-4
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-4
Industrial applicability (IA)	Yes: Claims	1-4
	No: Claims	

- 2. Citations and explanations**
see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Claim 3: The text, at lines 12-13, "which have read/write access to external memory" renders claim 3 unclear (Article 6 PCT) and confuses the reader.
Firstly due to the fact that claim 3 depends only on claim 1, it cannot be understood how the external memory is connected to the processing chips.
Secondly in case the external memory being connected through the interface of claim 1, because data writes are discarded it signifies compulsorily that the processor chips do not have write access to external memory.
- 2 For the sake of discussing it will be assumed that the above mentioned clarity objection has been overcome.
- 3 The subject-matter of claim 1 does not involve an inventive step and therefore the application does not meet the requirements of Article 33(3) PCT, for the following reasons:
 - 3.1 Claim 1 claims a data processing system consisting in:
 - a processor chip including a processor unit and an internal data cache, and
 - an interface adapted to discard any write instructions from the processor.
 - 3.2 According to the primary examiner knowledge, exists a well known prior art Intel 486 SL Microprocessor, which comprises an Intel486 DX core with on chip cache and a memory interface (i.e. memory controller).
 - 3.3 Claim 1 differs from this prior art only in that the interface is adapted to discard any write instructions from the processor.

This is however compulsory in case of ROM memory, because the interfacing of a standard CPU with on chip cache to a ROM memory will automatically discard any write instructions to the ROM memory.

Furthermore this does not produces any unexpected effect.
- 4 The subject-matter of claim 4 does not involve an inventive step and therefore the

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application does not meet the requirements of Article 33(3) PCT, for the following reasons:

- 4.1 The subject-matter of claim 4 corresponds in terms of method steps with the subject-matter of claim 1, which has not been considered inventive (see above items 3,3.1-3.3).
- 5 The additional features of dependent claims 2 and 3, do not add anything inventive to independent claim 1 as required by Article 33(3) PCT, for the following reasons:
 - 5.1 Claim 2: The interface of the Intel 486 SL is coupled to a memory and passes data to the CPU during initialisation.
 - 5.2 Claim 3: The use of a plurality of CPU's is a common measure.